Extron Electronics

INTERFACING, SWITCHING AND DISTRIBUTION

P/2 DA1

P/2 DA2 PLUS

P/2 DA2 LC

P/2 DA2 MT

P/2 DA2 WM

P/2 DA4 PLUS

P/2 DA6 PLUS

SW2 VGA DA2 A

SW2 VGA DA2 AF

Mac DA2 PLUS

13W3 DA2

VGA, MAC, & 13W3 DISTRIBUTION AMPLIFIERS

SERVICE · SUPPORT · SOLUTIONS
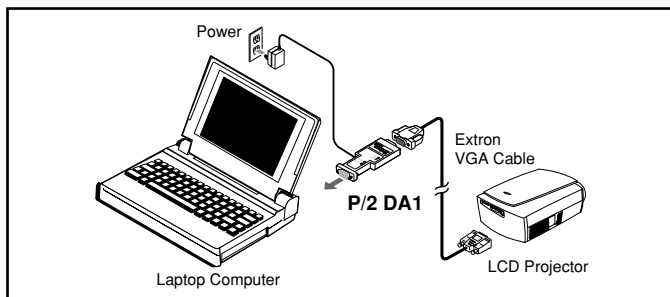3

P/2 DA1

P/2 DA1

Extron's **P/2 DA1,** "The Peaker," is an extremely small, one input, one buffered output VGA/SVGA/XGA/SXGA line driver. This DA drives a high resolution computer-video signal up to 250 feet through high-quality cable, such as Extron's VGA cable. The P/2 DA1 provides amplification and peaking. This allows the video signal to be run long distances and produces a brighter and sharper image than normally possible. This is especially useful in the case of laptops, which often output a low power video signal. The P/2 DA1 also restores low level sync voltages found on many laptops (as low as two volts) to normal TTL levels. This allows a laptop to function with display devices and cable types it normally wouldn't work with. The laptop's ID bits are passed through to the display. The P/2 DA1 is housed in an adapter-sized enclosure, which allows it to be easily connected directly to a laptop.

FEATURES

- **Bandwidth** – 300 MHz (-3dB) RGB video bandwidth.
- **Compatibility** – Compatible with VGA, SVGA, XGA, and SXGA graphic cards, monitors, and projectors as well as Macs with 15-pin HD output.
- **Input connector** – Features a 15-pin HD male connector for video input.
- **Output connectors** – Features a 15-pin HD female connector for buffered video output.
- **ID bits** – Laptop's ID bits are passed through to the display.
- **Gain and peaking** – User-selectable gain and peaking help maintain signal integrity during long cable runs.
- **Power supply** – A 110VAC, wall-mount power supply is attached to the USA/domestic version of the P/2 DA1, and a 110-220VAC, desktop power supply is attached to the world version of the P/2 DA1.
- **Part numbers**
  60-319-01 (USA/domestic)
  60-319-02 (World)

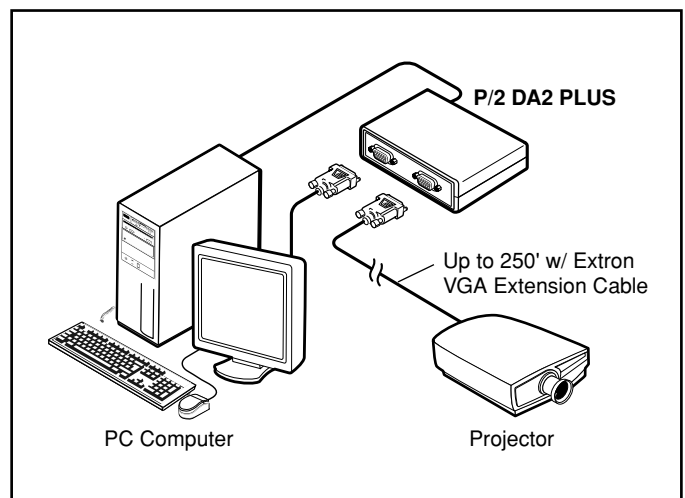### APPLICATION DIAGRAM

P/2 DA2 PLUS

P/2 DA2 PLUS

Extron's **P/2 DA2 PLUS** is a one input, two buffered output, high resolution VGA/SXGA distribution amplifier. This DA drives a high resolution computer-video signal up to 250 feet through high-quality cable, such as Extron's VGA cable.

FEATURES

- **Bandwidth** – 270 MHz (-3dB) RGB video bandwidth.
- **Compatibility** – Compatible with all modes/resolutions of VGA, SVGA, XGA, and SXGA graphic cards, monitors, and projectors.
- **Input connector** – Attached 4' 15-pin HD male cable is included for reliable connection of video signals.
- **Output connectors** – Features 15-pin HD female connectors for buffered video output and buffered local monitor output.
- **ID bits** – ID bits are routed to local monitor output.
- **Power supply** – A 110VAC, wall-mount power supply is attached to the USA/domestic version of the P/2 DA2 PLUS, and a 110-220VAC, desktop power supply is attached to the world version of the P/2 DA2 PLUS.
- **Part numbers**
  60-046-01 (USA/domestic)
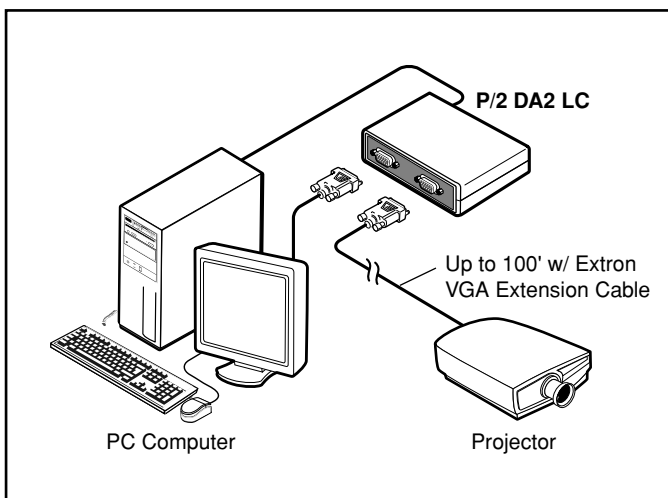 60-046-02 (World)

APPLICATION DIAGRAM

P/2 DA2 LC

P/2 DA2 LC

Extron's **P/2 DA2 LC** is a one input, two output, medium resolution VGA/XGA distribution amplifier. This cost-effective DA drives a computer-video signal up to 100 feet through high-quality cable, such as Extron's VGA cable.

FEATURES

■ **Bandwidth** – 150 MHz (-3dB) RGB video bandwidth.

■ **Compatibility** – Compatible with all modes/resolutions of VGA and XGA graphic cards, monitors, and projectors.

■ **Input connector** – Attached 1' 15-pin HD male cable is included for reliable connection of video signals.

■ **Output connectors** – Features 15-pin HD female connectors for buffered video output and non-buffered local monitor output.

■ **ID bits** – ID bits are routed to local monitor output.

■ **Power supply** – A 110VAC, wall-mount power supply is attached to the USA/domestic version of the P/2 DA2 LC, and a 110-220VAC, desktop power supply is attached to the world version of the P/2 DA2 LC.

■ **Part numbers**
  60-160-01 (USA/domestic)
  60-160-02 (World)

APPLICATION DIAGRAM

P/2 DA2 LC

Up to 100' w/ Extron VGA Extension Cable
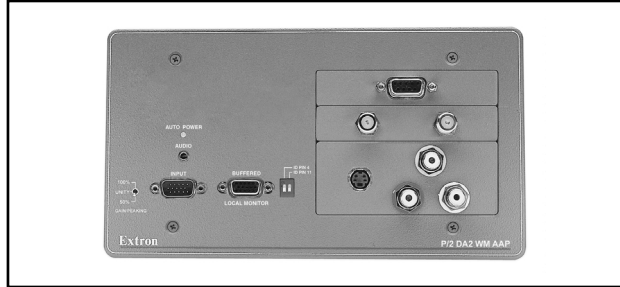
PC Computer   Projector

P/2 DA2 MT

P/2 DA2 MT

Extron's **P/2 DA2 MT** is a mountable, one input, two buffered output, high resolution VGA/SXGA distribution amplifier with audio. This DA drives a high resolution computer-video signal up to 250 feet through high-quality cable, such as Extron's VGA cable. For convenient access, the P/2 DA2 MT may be mounted under a desk or through a desk (through-desk mounting brackets are optional).

FEATURES

■ **Bandwidth** – 300 MHz (-3dB) RGB video bandwidth.

■ **Compatibility** – Compatible with all modes/resolutions of VGA, SVGA, XGA, and SXGA graphic cards, monitors, and projectors. Compatible with Mac sources and Mac-compatible displays with optional Mac/VGA adapter.

■ **Input connector** – Features a 15-pin HD female connector for video input.

■ **Output connectors** – Features 15-pin HD female connectors for buffered video output and buffered local monitor output.

■ **Audio connectors** – Features a 3.5 mm female audio jack for audio input and a 3.5 mm captive screw connector for balanced or unbalanced audio output.

■ **Audio interfacing** – Unbalanced audio may be converted to balanced audio. Balanced audio eliminates noise usually associated with unbalanced audio when distributed over long cable runs.

■ **ID bits** – ID bits are normally routed to local monitor output. ID bit termination is dip switch selectable.

■ **Level and peaking** (**display output only**) – Level control adjusts brightness level of image. Peaking control adjusts sharpness level of image.

■ **Mountable** – Includes detachable brackets for under-desk mounting. Optional brackets available for through-desk mounting.

■ **Power supply** – Includes an external 9VDC desktop power supply (detachable).

■ **Part number:** 60-295-01

P/2 DA2 WM

P/2 DA2 WM AAP (w/ Architectural Adapter Plates)

Extron's **P/2 DA2 WM** is a wall-mountable, one input, two buffered output, high resolution VGA/SXGA distribution amplifier with audio. This DA drives a high resolution computer-video signal up to 250 feet through high-quality cable, such as Extron's VGA cable. The P/2 DA2 WM is enclosed in a two-gang box with a face plate (available in grey, black, or white). It fits flush into a wall, podium, or table and blends into the environment. The P/2 DA2 WM is available in an EC model compatible with European channel mounting systems. Both the P/2 DA2 WM and the P/2 DA2 EC are available with openings for optional Architectural Adapter Plates to provide additional signal pass-through connectors.

FEATURES

The P/2 DA2 WM has the same features as the P/2 DA2 MT except for the following differences:

- **Bandwidth** – 270 MHz (-3dB) RGB video bandwidth.
- **Input connector** – Features a 15-pin HD male connector for input. The P/2 DA2 WM does not include an input cable.
- **Wall-mountable** – Self-contained enclosure allows easy installation into existing walls.
- **EC model** – EC version with white face plate available for European cable channel mounting systems.
- **Architectural Adapter Plate openings** – The P/2 DA2 WM and P/2 DA2 EC are available with openings for Architectural Adapter Plates (AAPs). Over 100 AAPs feature various video and audio signal pass-through connectors.
- **Power** – Accepts 12-24 AC/DC through captive screw connector. Power supply sold separately.

PART NUMBERS

P/2 DA2 WM (grey) 60-296-01
P/2 DA2 WM (black) 60-296-02
P/2 DA2 WM (white) 60-296-03
P/2 DA2 EC (white) 60-296-10
P/2 DA2 WM AAP (grey) 60-311-01
P/2 DA2 WM AAP (black) 60-311-02
P/2 DA2 WM AAP (white) 60-311-03
P/2 DA2 EC AAP (white) 60-311-10
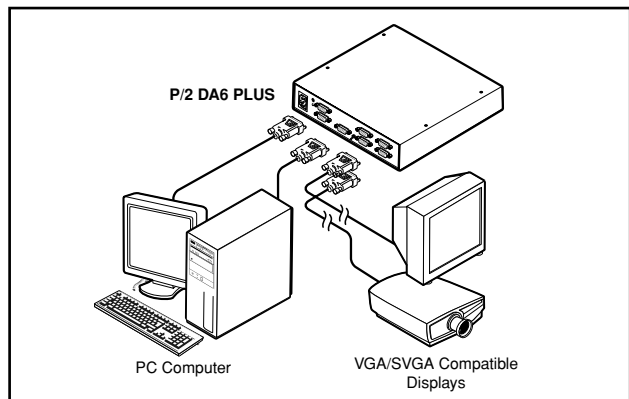
P/2 DA4 PLUS
P/2 DA6 PLUS

P/2 DA6 PLUS Shown

Extron's **P/2 DA4 PLUS** and **P/2 DA6 PLUS** are rack-mountable, high resolution VGA/SXGA distribution amplifiers. The P/2 DA4 PLUS provides four buffered outputs, and the P/2 DA6 PLUS provides six buffered outputs. Each DA drives a high resolution computer-video signal up to 250 feet through high-quality cable, such as Extron's VGA cable.

FEATURES

- **Bandwidth** – 300 MHz (-3dB) RGB video bandwidth.
- **Compatibility** – Compatible with all modes/resolutions of VGA, SVGA, XGA, and SXGA graphic cards, monitors, and projectors. Compatible with Mac sources and Mac-compatible displays with optional Mac/VGA adapter.
- **Video connectors** – Features 15-pin HD female connectors for video input, buffered video outputs, and buffered local monitor output.
- **ID bits** – ID bits are routed to local monitor output.
- **Boost** – Boost switch helps maintain signal integrity for long cable runs.
- **Rack-mountable** – Housed in a 1U high, 1/2 rack width enclosure.
- **Power supply** – Includes a worldwide, 100-240VAC, 50/60 Hz, auto-switchable internal power supply.
- **Part numbers**
  P/2 DA4 PLUS 60-246-01
  P/2 DA6 PLUS 60-245-01

APPLICATION DIAGRAM

SW2 VGA DA2 A
SW2 VGA DA2 AF

SW2 VGA DA2 A Shown

Combination Switcher and Distribution Amplifier–
Extron's **SW2 VGA DA2 A** and **SW2 VGA DA2 AF** are two
input, dual buffered output, mountable combination switchers and
distribution amplifiers. Each allows the user to select between two
HD-15 sources and output the selected source on two HD-15 out-
puts. For audio, the SW2 VGA DA2 A or SW2 VGA DA2 AF
switches two stereo audio sources to one stereo audio output. Each is
ideal for a boardroom or other small-scale installation that requires
two computers to share a local monitor and projector. Each output
drives a high resolution computer-video signal up to 250 feet
through high-quality cable, such as Extron's VGA cable. The differ-
ence between the SW2 VGA DA2 A and SW2 VGA DA2 AF is the
placement of the input connectors. For convenient front panel
connection to a computer, the SW2 VGA DA2 AF offers a HD-15
connector and a 3.5 mm female audio jack for one input on the
front panel, and all other connectors are on the back. The SW2
VGA DA2 A offers all connectors on the back panel.

FEATURES

- **Bandwidth –** 250 MHz (-3dB) RGB video bandwidth.
- **Compatibility –** Compatible with VGA, SVGA, XGA, and
  SXGA sources, monitors, and projectors. Compatible with
  Mac sources and Mac-compatible displays with optional
  Mac/VGA adapter.
- **Video connectors –** Two inputs and two independently
  buffered outputs using 15-pin HD female connectors.
- **Audio connectors –** Two unbalanced audio inputs using
  3.5 mm female audio jacks and one balanced or unbalanced
  audio output using 3.5 mm captive screw connector.
- **Auto-switchable –** Auto-switching and manual modes available.
- **Control –** Tactile switch buttons with LEDs and contact clo-
  sure control.
- **Power –** Accepts 12 VDC through jack or captive screw con-
  nector. Includes external power supply.
- **Mountable –** Includes detachable brackets for under-desk
  mounting. Optional mounting brackets available for through-
  desk mounting. Rack-mount/through-desk mounting
- **Part numbers**
  SW2 VGA DA2 A 60-297-01
  SW2 VGA DA2 AF 60-297-02
  Mounting Kit 70-077-03
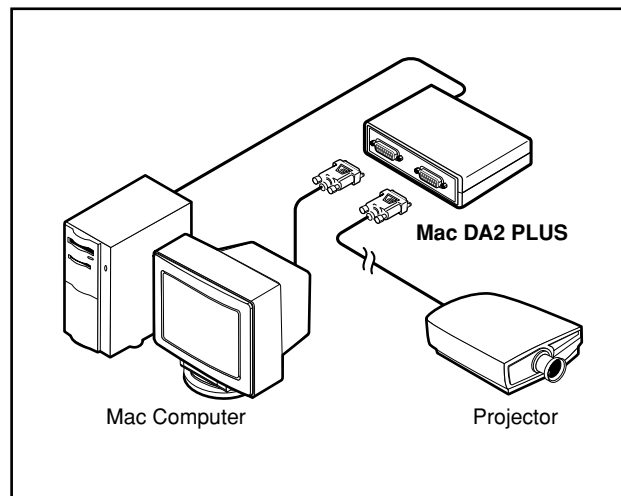
MAC DA2 PLUS

Mac DA2 PLUS

Extron's **Mac DA2 PLUS** is a one input, two buffered output,
high resolution Mac distribution amplifier. This DA drives a high
resolution Mac computer-video signal up to 200 feet through
high-quality cable, such as Extron's Mac/Quadra cable. For Mac
boot-up, with or without a monitor, the Mac DA2 PLUS includes a
sense line (ID bit) rotary switch with twelve resolutions available.

FEATURES

- **Bandwidth –** 270 MHz (-3dB) RGB video bandwidth.
- **Compatibility –** Compatible with all modes/resolutions of
  Mac, Quadra, Performa, Centris, Radius, E-Machines,
  PowerMac, and PowerBook sources and Mac-compatible
  displays.
- **Input connector –** Attached 4' 15-pin D male cable is
  included for reliable connection of video signals.
- **Output connectors –** Features 15-pin D female connectors
  for buffered video output and buffered local monitor output.
- **ID bits –** Sense line termination available at twelve different
  resolutions for Mac boot-up, with or without monitor.
- **Power supply –** Includes an external 9VDC desktop power
  supply.
- **Part number:** 60-081-02

APPLICATION DIAGRAM

Mac DA2 PLUS

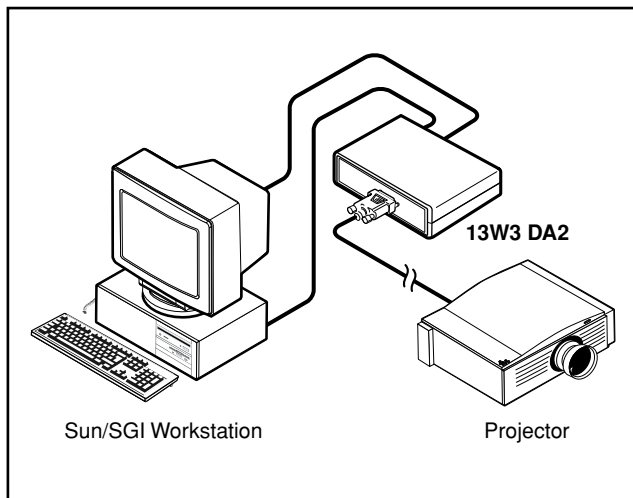Mac Computer   Projector

13W3 DA2

13W3 DA2

Extron's **13W3 DA2** is a one input, two buffered output, high resolution 13W3 distribution amplifier. This DA drives a high resolution computer-video signal up to 100 feet through high-quality cable, such as Extron's 13W3 cable. The 13W3 DA2 maintains signal integrity during long cable runs.

FEATURES

- ■ **Bandwidth** – 300 MHz (-3dB) RGB video bandwidth.

- ■ **Compatibility** – Compatible with Sun and SGI workstations and workstation-compatible displays.

- ■ **Input connector** – Attached 4' 13W3 male cable is included for reliable connection of video signals.

- ■ **Output connectors** – Features 13W3 female connectors for buffered video output and buffered local monitor output.

- ■ **ID bits** – ID bits are routed to local monitor output.

- ■ **Power supply** – Includes an external 9VDC desktop power supply.

- ■ **Part number:** 60-128-02

APPLICATION DIAGRAM

Sun/SGI Workstation   **13W3 DA2**   Projector

SPECIFICATIONS

Video Input
Number/signal type
- • SW 2 VGA DA2 A/AF........ 2 VGA, SVGA, XGA, SXGA
- • P/2 DA2 LC....................... 1 VGA, SVGA
- • All others .... 1 VGA, SVGA, XGA, SXGA
Connectors
- • P/2 DA2 WM .... 1 15-pin HD male
- • Mac DA2 PLUS .... 1 15-pin D female
- • 13W3 DA2 .... 1 13W3 female
- • SW2 VGA DA2 A/AF .... 2 15-pin HD female
- • All others .... 15-pin HD female
Nominal levels .... Analog 0.5V to 1.2V p-p
Maximum levels .... Analog 2VDC with no offset
Impedance .... 75 ohms
Horizontal frequency .... 15 kHz to 135 kHz
     (Except P2 DA2 LC: 15kHz to 45kHz)
Vertical frequency....................... 30 Hz to 170 Hz
     (Except P2 DA2 LC: 30Hz to 120Hz)

Video Throughput
Gain
- • P/2 DA 4 & 6 PLUS .... 0.7V or 1.0V, switchable
- • P/2 DA1............................. 0.7V, 0.8V, 0.9V
- • P/2 DA2 MT 0.7V, 0.8V
- • P/2 DA2 WM 0.7V, 0.8V
Bandwidth
- • P/2 DA2 LC .... 150 MHz (-3dB)
- • P/2 DA2 WM .... 270 MHz (-3dB)
- • P/2 DA2 PLUS .... 270 MHz (-3dB)
- • Mac DA2 PLUS .... 270 MHz (-3dB)
- • SW 2 VGA DA2 A/AF............. 250 MHz (-3dB)
- • All others .... 300 MHz (-3dB)

Video Output
Number/signal type
- • P/2 DA1 .... 1 VGA, SVGA, XGA, SXGA
- • P/2 DA2 LC .... 2 VGA, SVGA, XGA
- • P/2 DA4 & 6 PLUS............ 4 & 6 (respectively) VGA, SVGA, XGA, SXGA
- • All others .... 2 VGA, SVGA, XGA, SXGA
Connectors
- • P/2 DA1............................. 1 15-pin HD male
- • Mac DA2 PLUS .... 2 15-pin D female
- • 13W3 DA2 .... 2 13W3 female
- • P/2 DA4 & 6 PLUS............ 4 & 6 respectively 15-pin HD
- • All others .... 2 15-pin HD female
Nominal level.............................. Unity, 1x input level
Impedance .... 75 ohms

Audio Input
Number/signal type
- • P/2 DA2 WM and
   P/2 DA2 MT .... 1 stereo, unbalanced
- • SW 2 VGA DA2 A/AF........ 2 stereo, unbalanced
Connectors
- • P/2 DA2 WM and
   P/2 DA2 MT......................... 1 3.5 mm stereo jack
- • SW2 VGA DA2 A/AF............ 2 3.5 mm stereo jacks

Audio Throughput
Gain
- • P/2 DA2 MT, P/2 DA2 WM,
   SW 2 VGA DA2 A/AF .... Unbalanced 0 dB, balanced +6 dB
Frequency response
- • P/2 DA2 MT, P/2 DA2 WM,
   SW 2 VGA DA2 A/AF .... 0 Hz to 20 kHz

Audio Output
Number/signal type
- • P/2 DA2 MT, P/2 DA2 WM,
   SW 2 VGA DA2 A/AF........ 1 stereo balanced or unbalanced
Connectors
- • P/2 DA2 MT, P/2 DA2 WM,
   SW 2 VGA DA2 A/AF .... 1 3.5 mm captive screw, 5 pole
Impedance .... 50 ohms, unbalanced; 100 ohms, balanced